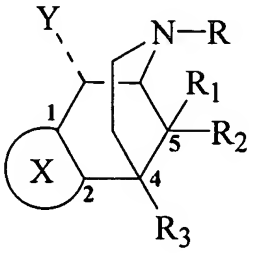
AMENDMENTS TO THE CLAIMS

Kindly amend claim 1 and cancel claims 2, 3, 5-7, 9, 12-15, and 20-22 as provided in the following Claims Listing.

Claims Listing:

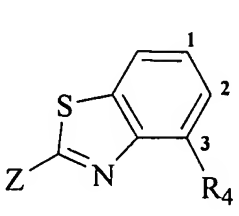
1. (Currently Amended) A compound of formula I:

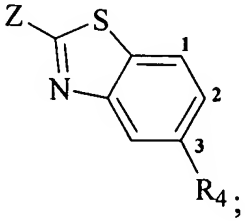


(I)

or a pharmaceutically acceptable salt thereof, wherein

X includes the carbon atoms at positions 1 and 2 and is selected from



and


;

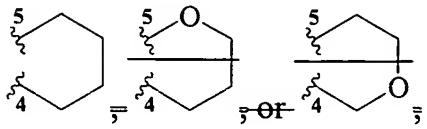
Y is H, oxo, or methyl;

R is selected from H, C_{1-7} alkyl, C_{2-7} alkenyl, C_{2-7} alkynyl, C_{2-6} heterocyclyl, C_{6-12} aryl, C_{7-14} alkaryl, C_{3-10} alkheterocyclyl, and C_{1-7} heteroalkyl;

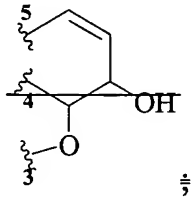
R_1 is ~~selected from~~ H ~~and CH_3~~;

R_4 is H and R_2 and R_3 ~~are each, independently, H, C_{1-7} alkyl, or R_2 and R_3~~ combine to

form a fused six-membered ring in which position 4 is connected to position 5 by



~~or R_4 combines with R_2 and R_3 to form a fused ring system in which position 3, 4, and 5 are connected by~~



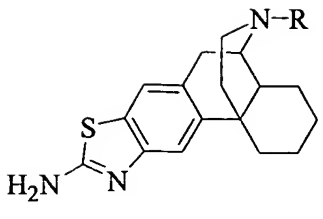
Z is ~~selected from~~ $-NHR_5$ ~~and $-N(R_6)_2$~~; and

R_5 is ~~selected from~~ ~~H, C_{1-7} alkyl, C_{2-7} alkenyl, C_{2-7} alkynyl, C_{2-6} heterocyclyl, C_{6-12} aryl, C_{7-14} alkaryl, C_{3-10} alkheterocyclyl, C_{1-7} heteroalkyl, acyl, and fatty acid acyl; and each R_6 is, independently, selected from C_{1-7} alkyl, C_{2-7} alkenyl, C_{2-7} alkynyl, C_{2-6} heterocyclyl, C_{6-12} aryl, C_{7-14} alkaryl, C_{3-10} alkheterocyclyl, and C_{1-7} heteroalkyl~~.

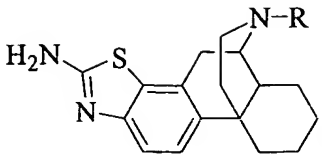
2. Canceled.

3. Canceled.

4. (Original) The compound of claim 1, wherein said compound is described by formulas II or III:



(II)

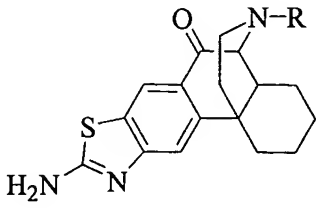


(III)

or a pharmaceutically acceptable salt thereof, wherein R is selected from H, C_{1-7} alkyl, C_{2-7} alkenyl, C_{2-7} alkynyl, C_{2-6} heterocyclyl, C_{6-12} aryl, C_{7-14} alkaryl, C_{3-10} alkheterocyclyl, and C_{1-7} heteroalkyl.

5-7. Canceled.

8. (Original) The compound of claim 1, wherein said compound is described by formula IX:



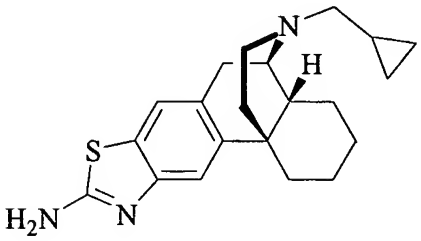
(IX)

or a pharmaceutically acceptable salt thereof, wherein R is selected from H, C_{1-7} alkyl, C_{2-7} alkenyl, C_{2-7} alkynyl, C_{2-6} heterocyclyl, C_{6-12} aryl, C_{7-14} alkaryl, C_{3-10} alkheterocyclyl, and C_{1-7} heteroalkyl.

9. Canceled.

10. (Previously Presented) The compound of claim 4 or 8, wherein R is selected from CH_3, CH_2(cyclo-C_4H_7), CH_2(cyclo-C_3H_5), $CH(CH_3)$(cyclo-C_3H_5), $CH_2CH_2CH_2F$, $CH_2CH_2OCH_3$, $CH_2CH_2OCF_3$, $CH_2CH(CH_3)_2$, $CH_2CH{=}CH_2$, *trans*-$CH_2CH{=}CHI$, $CH_2C{\equiv}CH$, benzyl, phenethyl, 3,4-dichlorophenethyl, 3-furanylmethyl, 2-furanylmethyl, 3-tetrahydrofuranylmethyl, and 2-tetrahydrofuranylmethyl.

11. (Original) The compound of claim 10, wherein said compound has the structure



or a pharmaceutically acceptable salt thereof.

12-15. Canceled.

16. (Previously Presented) A pharmaceutical composition comprising an effective amount of a compound of any of claims 1, 4, 8, 10, or 11, or a suitable salt thereof, together with a pharmaceutically acceptable carrier or diluent.

17. (Original) A method of treating pain in a patient in need thereof, said method comprising the step of administering to said patient a pharmaceutical composition of claim 16 in an amount sufficient to treat said pain.

18. (Original) A method of treating a dopamine dysregulation disease in a patient in need thereof, said method comprising the step of administering to said patient a pharmaceutical composition of claim 16 in an amount sufficient to treat said disease.

19. (Original) The method of claim 18, wherein said disease is selected from the group consisting of schizophrenia, attention deficit hyperactivity disorder (ADHD), attention deficit hyperactivity disorder (ADD), Parkinson's disease, hyperprolactinemia, depression, and addiction.

20-22. Canceled.